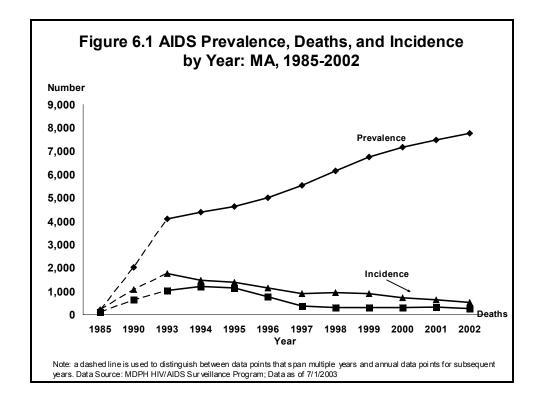
## Chapter 6. How have patterns of AIDS diagnoses changed over time?

To describe how patterns of AIDS diagnoses have changed over time, Chapter 6 presents a profile of annual AIDS diagnoses for the 10-year period of 1993 – 2002, plus the years 1985 and 1990 for historical reference. While some of these changes over time may be due to reporting patterns, it is likely that much of the change can be attributed to factors inherent in the epidemic and the response of the Massachusetts community to it. For instance, the initial steep rise in AIDS cases reflects the earlier years of the epidemic when less was known about the transmission of HIV, effective medical treatment did not exist, and less time elapsed between HIV infection and an AIDS diagnosis. The decreases in new AIDS diagnoses sustained across more recent years may reflect increased awareness about HIV and the prevention of its transmission. Additionally, the introduction of new highly active antiretroviral drugs after 1994 and increased access to them in Massachusetts, postponed the onset of AIDS among many individuals, causing a decrease in new diagnoses.

For more recent years, the AIDS trend data are not as closely tied to trends in HIV infection as they were in the earlier years when the time from HIV infection to AIDS diagnosis was shorter. Rather, annual AIDS diagnoses serve as a marker for increased levels of illness (i.e. morbidity) among people who are living with HIV infection.

While the AIDS trend data describe population-based shifts in HIV related morbidity over time, they do not provide insight into what may be causing differential levels of morbidity experienced by various sub-populations. Information about the factors that contribute to differential morbidity is crucial to our understanding of the epidemic, and is needed to help address gaps in services and better understand who may be experiencing barriers to care, treatment and support services. Please see Chapter 8, "What are the patterns of service utilization of HIV-infected people in Massachusetts?" for a summary of other data that can inform planning for care and treatment of people living with HIV/AIDS.

## Section 1. People diagnosed with AIDS from 1985-2002

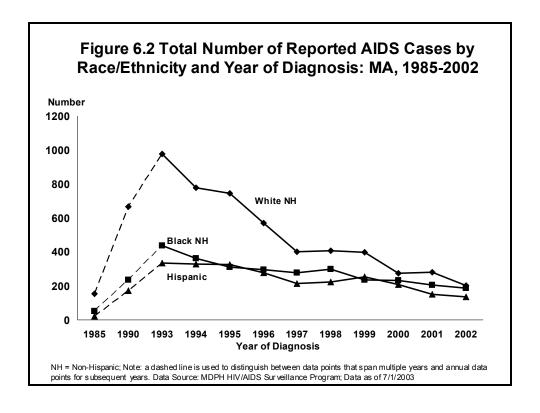


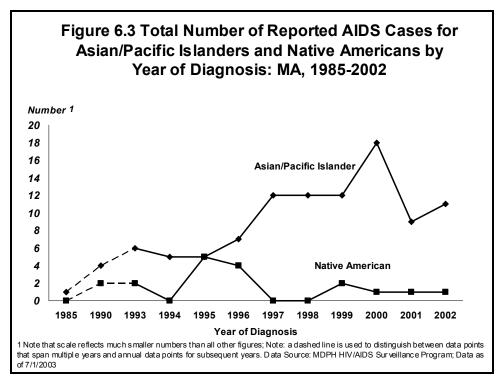
- The number of people living with AIDS (AIDS prevalence) has been steadily increasing each year to 7,762 by the end of year 2002.
- After reaching a peak of 1,206 in 1994, deaths among individuals diagnosed with AIDS declined each year until 1998, when there were 313 deaths. However, from 1998-2002, the number of AIDS deaths remained steady at about 300 deaths in each of these years. In 2002, there were 260 deaths among individuals reported with AIDS.
- After reaching a plateau at around 900 cases each year from 1997-1999, AIDS incidence appears to have declined from 2000 -2002. However, this drop should be interpreted with caution, as additional case finding throughout the coming year is likely to increase the number of diagnoses from these years.

See Table A.23 in Appendix 1 for further detail.

	Male		Female		
By Year:	N	%	N	%	Tota
1985	204	90%	23	10%	227
1990	886	82%	195	18%	1,081
1993	1,376	78%	382	22%	1,758
1994	1,143	77%	333	23%	1,476
1995	1,057	76%	338	24%	1,395
1996	844	73%	309	27%	1,153
1997	674	75%	230	25%	904
1998	684	72%	261	28%	945
1999	657	73%	244	27%	901
2000	517	71%	216	29%	733
2001	442	69%	203	31%	645
2002	381	71%	155	29%	536

- Over time there has been a greater decline in AIDS diagnoses among males than among females:
  - From 1993 to 1997, there was a 51% decline in the number of AIDS diagnoses among males and a 40% decline among females.
  - From 1997 to 2002, there was a 43% decline in the number of AIDS diagnoses among males and a 33% decline among females.
- The average proportion of AIDS diagnoses among females in the past three years (30%) has increased since the earlier years of the epidemic in the mid 1980s and early 1990s.





In 2002, there were 202 (38%) Whites, 187 (35%) Blacks, 135 (25%) Hispanics, 11 (2%) Asian/Pacific Islanders, and 1(<1%) American Indian/Alaska Native newly diagnosed with AIDS.</li>

- For the past ten years (from 1993-2002), Whites have made up the largest number
  of people diagnosed with AIDS each year across race/ethnicity in MA. However 202
  White (non-Hispanic) people were diagnosed with AIDS in 2002, compared with 187
  Blacks (non-Hispanic).
- From 1993 to 2002, the proportion of newly diagnosed AIDS cases that are among Blacks increased from 25% to 35% and the proportion among Hispanics increased from 19% to 25%.

See Table A.24 in Appendix 1 for further detail.

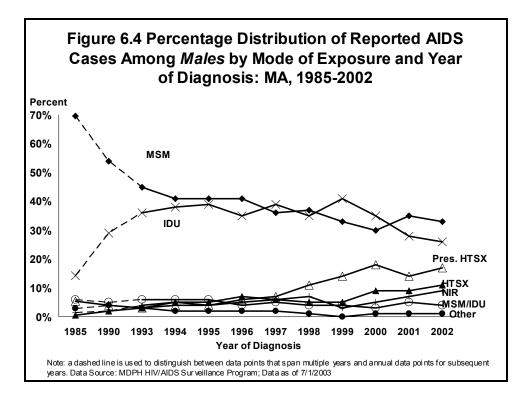
Table 6.2 Number and Percent of Reported AIDS Cases by Exposure Mode<sup>1</sup> and Year of Diagnosis: MA, 1985-2002

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX		NIR		To- tal
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
1985	142	63%	32	14%	12	5%	7	3%	13	6%	17	7%	4	2%	227
1990	479	44%	343	32%	45	4%	76	7%	58	5%	53	5%	27	2%	1,081
1993	623	35%	706	40%	80	5%	170	10%	55	3%	63	4%	61	3%	1,758
1994	474	32%	576	39%	65	4%	198	13%	29	2%	65	4%	69	5%	1,476
1995	431	31%	579	42%	60	4%	167	12%	36	3%	70	5%	52	4%	1,395
1996	348	30%	439	38%	33	3%	173	15%	35	3%	75	7%	50	4%	1,153
1997	242	27%	358	40%	32	4%	121	13%	20	2%	81	9%	50	6%	904
1998	251	27%	335	35%	26	3%	120	13%	19	2%	140	15%	54	6%	945
1999	217	24%	362	40%	23	3%	110	12%	4	0%	162	18%	23	3%	901
2000	157	21%	254	35%	13	2%	120	16%	9	1%	150	20%	30	4%	733
2001	155	24%	193	30%	23	4%	94	15%	10	2%	122	19%	48	7%	645
2002	125	23%	149	28%	17	3%	82	15%	4	1%	110	21%	49	9%	536

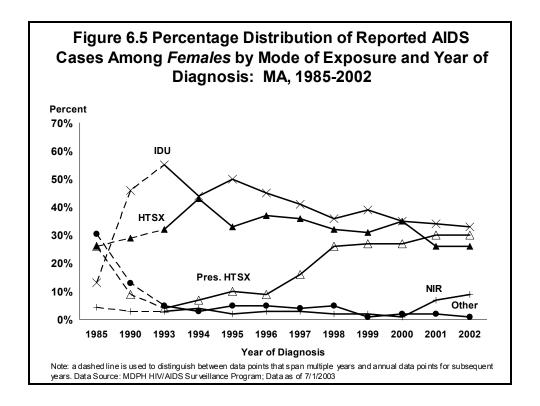
<sup>1</sup> See the Glossary for an explanation of Exposure Mode categories. MSM = male-to-male sex; IDU = injection drug use; MSM/IDU = male-to-male sex and injection drug use; HTSX = heterosexual sex; Pres. HTSX = presumed heterosexual; NIR = No Identified Risk. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/03

- From 1993 to 2002 the number of new AIDS diagnoses declined for each exposure mode, except presumed heterosexual which increased during this time period.
- In 1992, the number of new AIDS diagnoses with injection drug use as the reported exposure mode (N=688) surpassed the number of AIDS diagnoses with male-tomale sex as the reported exposure mode (N=650), and this shift has been sustained through 2002.
- The proportion of new AIDS diagnoses that have male-to-male sex as the reported exposure mode has declined from 35% in1993 to 23% in 2002.
- From 1993 to 2000, the percentage of new AIDS diagnoses with injection drug use as the reported exposure mode fluctuated between 35% and 42% and from 2001 to 2002 it declined from 30% to 28%.

Note: For interpretation of the category "presumed heterosexual," see note on page 17.



• The proportion of new AIDS diagnoses with male-to-male sex as the reported exposure mode has declined in the past ten years from 45% in 1993 to 33% in 2002. See Table A.25 in Appendix 1 for further detail.



- The proportion of new AIDS diagnoses in females with injection drug use as an exposure mode has decreased from 1993 (55%) to 2002 (33%).
- From 1993 to 2002, injection drug use was the exposure mode for the largest proportion of new AIDS diagnoses among females.
- The proportion of new AIDS diagnoses among females exposed through presumed heterosexual sex increased from 1993 (4%) to 2002 (30%).

See Table A.26 in Appendix 1 for further detail.

Note: For interpretation of the category "presumed heterosexual," see note on page 17.

Chapter 6. How have patterns of AIDS diagnoses changed over time?